

**In the Claims:**

Please cancel claims 4-5 and 7; amend claims 1, 2 and 6; and add claims 8-9. All pending claims, whether or not amended, are presented below for the Examiner's convenience and will replace all prior versions, and listings, of claims in the application:

Claims 3-5 and 7 (Cancelled).

1. (Currently amended) A method of ~~improving making an~~ oligonucleotide array of porous polymer pads used in binding assays, said improvement comprising:

- a. providing said ~~an~~ array of porous polymer gel pads on the surface of a solid support, ~~wherein said porous polymer pads are functionalized;~~
- b. adding binding an specific substance oligonucleotide probe to each of said porous polymer gel pads;
- c. freezing said array of porous polymer gel pads ~~on said solid support comprising said oligonucleotide probes;~~ and
- d. drying said array of porous polymer gel pads ~~on said solid support at reduced pressure; for a time sufficient to increase the pore size of each of said porous polymer gel pads~~

~~wherein, said freeze drying increases the pore size of said porous polymer pads.~~

2. (Currently amended) An oligonucleotide array of freeze-dried porous polymer gel pads on a solid support, comprising a specific substance bound to each of the porous polymer gel pads, prepared using the steps of claim 1.

6. (Currently amended) The method of claim 1 ~~5~~ wherein said freezing is at liquid nitrogen temperatures and said drying is by sublimation.

8. (New) The array of claim 1, wherein said oligonucleotide probe is a DNA probe.

9. (New) The array of claim 1, wherein said oligonucleotide probe is an RNA probe.